

ABSTRACT OF THE DISCLOSURE

A spin addition method for catalyst elements is simple and very important technique, because the minimum amount of a catalyst element necessary for crystallization can be easily added by controlling the catalyst element concentration within a catalyst element solution, but there is a problem in that uniformity in the amount of added catalyst element within a substrate is poor. The non-uniformity in the amount of added catalyst element within the substrate is thought to influence fluctuation in crystallinity of a crystalline semiconductor film that has undergone thermal crystallization, and exert a bad influence on the electrical characteristics of TFTs finally structured by the crystalline semiconductor film. The present invention solves this problem with the aforementioned conventional technique. If the spin rotational acceleration speed is set low during a period moving from a dripping of the catalyst element solution process to a high velocity spin drying process in a catalyst element spin addition step, then it becomes clear that the non-uniformity of the amount of added catalyst element within the substrate is improved. The above stated problems are therefore solved by applying a spin addition process with a low spin rotational acceleration to a method of manufacturing a crystalline semiconductor film.